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Individuals Account Review

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Individuals Account Review

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Foreword

This effort was funded by the Office of Naval Research under program element number PE 0605152N, sponsored by the Assistant Commander Navy Personnel Command for Distribution (PERS-4). The objective of this study was to review and analyze the Navy's Individuals Account (IA) to make recommendations concerning the accuracy and adequacy of coverage of the IA and whether current automated systems need to be updated.

The authors wish to thank the project officers LCDR Cheryl Cotton and LCDR Sharon Chamness (PERS-45) for their assistance and persistence in this project. Additional thanks to Mr. John Dooley, Assistant Head, MPN Analysis Section (N12), for educating us in many of the intricacies of the IA and also in reviewing drafts of the final product.

DAVID L. ALDERTON, Ph.D.
Director

Executive Summary

Navy personnel serving on active duty may be broadly grouped as either distributable personnel or non-distributable personnel. Distributable personnel are Navy members available for assignment to an authorized billet and are accounted for in various "for duty" personnel accounts. Personnel who are not available for assignment to an authorized billet (non-distributable) are accounted for through the Individuals Account (IA). The IA account can be viewed as an "overhead" account or as the Navy's cost of doing business.

A review of IA practices and policies reveals that some of the Navy's accounting practices are inconsistent with DOD policy and that the Navy's use of IA terminology is internally inconsistent. There are discrepancies in the Navy Instruction governing IA projections (OPNAVINST 1000.16J) and data sources used for these projections. There are unresolved issues in the timeliness and accuracy of personnel accounting so that it is difficult to establish a correspondence between where personnel are located and how they are accounted for in the IA data systems.

Additionally, the Transients and Holdees numbers are managed separately from Student and Trainee numbers and the process of qualitization¹ is managed separately from the numbers. This adds additional complexity from an organizational perspective in determining IA size and composition.

Recommendations are:

1. Ensure that accounting and programming practices be internally consistent and compliant with DOD procedures.² (This was previously recommended by Buckley, Mosteller, et al., in NPRDC-TN-90-8, January 1990.)

Change all reference and use of Transients, Patients, Prisoners, and Holdees (TPPH) to Transients and Holdees (TH). The Holdees account would be further divided into Patients, Prisoners, and Separatees subcategories.

Establish an N1 working group to decide on the appropriate IA category for the Navy's TEMDU Transients that is consistent with DOD policies.

Ensure that manpower and personnel instruction materials make clear the uses of the Individuals accounts and the need to communicate clearly regarding these accounts in correspondence, reports, and briefings.

2. Improve the timeliness and accuracy of accounting for personnel.

Establish an N1 working group to decide: 1) responsibility for management of ACC code structure; and 2) the business rules required by N1 data systems to clearly differentiate and track personnel as they move through the various ACC categories.

Apply transactions as they occur and ensure real-time system updates are available to managers.

¹ Qualitization is the process of disaggregating active duty personnel by skill, pay grade, and other qualifications that are needed to accomplish military missions.

² Buckley, R., Mosteller, J., Pinciario, S., Shurmeier, D., & Su, Y. (1990). *Analysis of the Individuals Account for Officers* (NPRDC-TN-90-8). Navy Personnel Research and Development Center, San Diego, CA.

3. Perform a day-to-day tracking analysis of the personnel and pay data systems to identify discrepancies in how personnel are categorized into accounting codes with particular emphasis on the transient-trainee/student codes. This analysis would use one year of recent personnel data.
4. Ensure a proactive, effective Navy representation in any OSD effort to revise policy, categories, or composition of these accounts.
5. Ensure an effective and efficient organization, policies, and procedures to minimize the impact of internally accommodated programs for members whose availability, although limited, is sufficient for continued force structure assignments.
6. Reorganize management of the IA to foster closer coordination between the Trainees and TPPH accounts as well as the process of qualitzation.

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Introduction

This report was commissioned by Navy Personnel Command (NAVPERSCOM) to: (1) review and analyze the Individuals Account (IA) to determine if current accounting methods accurately capture the number of personnel included in the IA; (2) determine if other categories of personnel should be included in the IA; (3) review the different methods and systems used to estimate the size and composition of the IA; and (4) make recommendations concerning the accuracy and adequacy of coverage of the IA and whether current automated systems need to be updated. Information was gathered by reviewing background materials, including previous reports and materials. In addition, information was obtained through interviews with N12, PERS-452, and Bureau of Medicine and Surgery (BUMED) personnel, as well as program managers from the Air Force, Army, and Marine Corps.

Background

Navy personnel serving on active duty may, in general, be classified as either distributable personnel or non-distributable personnel. Distributable personnel are those Navy members available for assignment to an authorized billet. Distributable personnel are accounted for in various "for duty" personnel accounts. Personnel who are not available for assignment to an authorized billet (non-distributable) are accounted for through the IA. The IA is composed of trainees, transients, patients, prisoners, and holdees. The last four categories make up the TPPH portion of the IA. The IA can be viewed as an "overhead" account or as the Navy's cost of doing business. It can be considered as a type of indirect cost or cost that is expended to support the productive units and to maintain force structure over time. Figure 1 shows these categories as percentages of personnel assigned to authorized billets. As noted in Figure 1, non-distributable personnel make up 14 percent of Navy personnel, with students the largest single component.

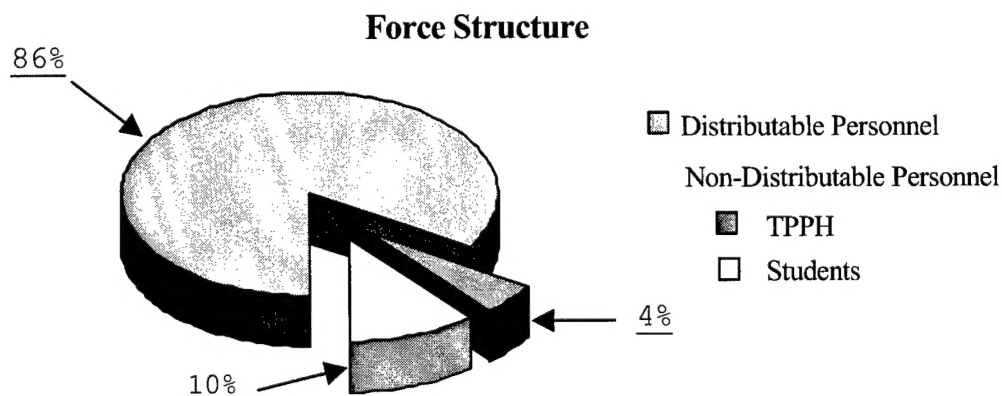


Figure 1. Distributable vs. Non-Distributable Personnel.

Overview

This report is a review of a broad range of issues related to the IA as opposed to reviewing one issue in great depth.

Requirements Determination

Services request, obtain, count, categorize, and report manpower and personnel resources according to a set of DOD instructions (DODI), primarily DODI 1120.11. This section is a brief overview of those processes.

Typically the question of how much manpower the Navy needs is answered through a process known as manpower requirements determination. This requires study of the work to be performed and a determination of workload to calculate man-hours and man-years to accomplish required tasks. These methodologies are not suitable for the IA because workload is not a determinant in estimating the IA man-years. For the IA, other approaches are taken to estimate the requirements. Extrapolation, programming factors, and models that are linked to strength plans, force structure, or policy are employed to size the accounts within the IA.

DODI 1120.11 requires the Services to provide programming factors used for Permanent Change of Station (PCS) cost and no-cost moves and the IA. This instruction states that in the case of Students, Trainees, Officer Accessions, and Transients the programming factors must be accompanied by methodologies used to develop end-strength estimates. For example, the programming factors for Holdees are based on historical strength of Holdees as a percentage of end-strength. In general, the Student, Trainee, and Officer Accession Student accounts are sized based upon training loads and planned accession levels, and the Transient account on average lengths of Permanent Change of Station moves and budgeted move plans, for Enroute Transients, and average on board counts and programmed end-strength controls, for TEMDU Transients.³

Programming

The size of the IA is estimated in the Program Objectives Memorandum (POM) portion of the Planning, Programming and Budgeting System (PPBS). The IA manpower Future Years Defense Plan (FYDP) numbers reflect end-strength in the various Program Elements that contain the IA. In the case of Transients and Holdees, the manpower numbers are in discreet Program Elements. For Students, Enlisted Trainees, Officer Accession Students, and Cadets and Midshipmen, the numbers will be in the training Program Elements and labeled with the applicable Resource Identification Codes (RICs).

Incidental to programming manpower, the Services need to translate FYDP numbers into manpower or billet authorizations for each of the FYDP years. Typically, this involves putting an authorization toward existing or newly developed manpower requirements. The manpower requirements provide the qualitative detail that is needed to plan the personnel

³ Appendix C contains an extract of OPNAVINST 1000.16J detailing calculations used to size accounts. However, it has been noted that the data source for determining "(2) TPPH Part 2 TEMDU Calculation" is not DFAS data as stated in the Instruction but NES/OPINS data. Additionally the data used to calculate the Student portion of the IA account appears to be from NES/OPINS vice NITRAS.

inventory in annual increments over the FYDP period. End-strength will equal the billet authorizations in force structure plus the FYDP numbers in the IA.

Budgeting

In budgeting, the Services incorporate the manpower-driven demand for personnel with the existing active duty force of active duty personnel and project the future force through strength plans. These plans are priced and serve as the basis for the Military Personnel portion of the budget requests. The central strength planning effort fosters subordinate plans including recruiting and accession goals, training plans, and promotion plans. These subordinate plans incorporate the IA portion of active duty strength because the plans must achieve end-strength each projected year.

Execution

In program execution, service members are categorized, counted, and reported. Members are tracked into, through, and out of the IA as they come to active duty status, populate the force structure, and are released from active duty. The execution systems are integrated in some fashion with the planning, programming, and budgeting systems since some reporting requirements must show execution with respect to program and budget structure. As the year progresses, execution may include some manipulation of promotions, accessions, and separations to achieve end-strength within budget.

IA Structure

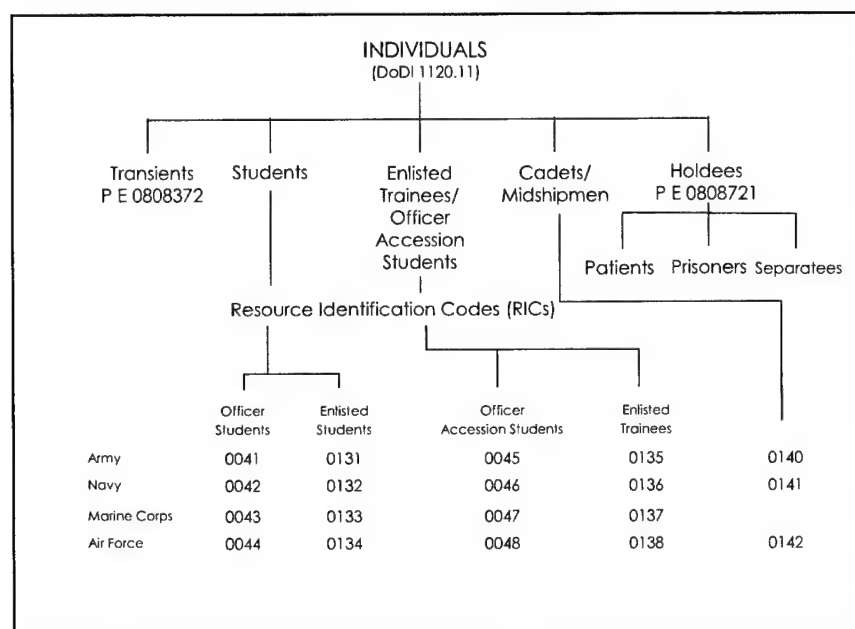


Figure 2. IA Structure.

As defined by DODI 1120.11, Figure 2 graphically depicts the make up of the IA and the naming conventions that are to be used by all services. A combination of Program Elements (PEs—also called Program Element Codes (PECs)) and Resource Identification Codes (RICs) are used to relate manpower and personnel to the various Individuals' Accounts.

IA Definitions

The circumstances under which personnel shall be counted and reported as active duty military as well as in the IA per DODI 1120.11 note that:

“Transients includes members in travel, proceed, leave and temporary duty while executing all types of Permanent Change of Station (PCS) moves including no cost moves involving leave or temporary duty en route. Specifically excluded from Transients are members on temporary duty for training en route (Students) and Enlisted Trainees or Officer Accession Students except when traveling from the last initial entry course to the first duty station.”

The implication is that an accession moving through the initial training pipeline is to be accounted for as an Enlisted Trainee (or Officer Accession Student) throughout the pipeline and then as a Transient when making the final move from the pipeline to their first permanent duty station.

Other categories such as the Patients and the Prisoners categories within the Holdees program element use the passage of time as a condition of classification. For example, patient status is achieved with 90 days of hospitalization for land-based units and “...60 days for members on sea duty⁴.” The periods of time have an “...exceeded or is expected to exceed ...” provision which necessitates a judgment to rule on the length of time personnel may be hospitalized.

Prisoner status is achieved with conviction and confinement of 30 days or more. If sentenced for six months or more the prisoner is dropped from active strength (and from Individuals as well) when the sentence begins. Conditions not requiring a time element to achieve Prisoner status include:

Member is awaiting disposition after having returned to military control from a dropped-from-strength status.

Member must be reassigned from sea duty to ensure operational readiness of a ship.

There are provisions in DODI 1120.11 that prohibit including unit personnel (personnel that are available to perform mission-related duties) in the IA. The prohibition includes cases where a member is temporarily away from the unit and will return to the unit.

⁴ Although not in compliance with DODI 1120.11, BUMED instituted a 60-day standard. According to comments by N12 personnel the rationale was that physicians indicated one could not achieve case resolution with regard to retain vs. permanent disability designation within 30 days. This was particularly true in many cited orthopedics cases. The declined alternative would have been to adopt a more harsh disability standard, which would have been less fair to members and potentially more costly in replacement/retraining.

IA Management

Through reorganization and evolution of information systems the critical elements for managing the IA are fragmented and hampered by information system design and data. Transients and Holdees numbers are managed separately from Student and Trainee numbers. Quality is administered separately from the numbers with N122 maintaining Transients and Holdees and Chief of Naval Education and Training (CNET) writing the Student and Trainee quality. The Total Force Manpower Management System (TFMMS) limits a billet number to a single authorization. The limitation increases workload for managing Individuals quality. Also, segmented management (TPPH versus Students and Trainees) of the quality forecloses on opportunities to deal with fractional utilization rates (e.g., $\frac{1}{4}$, $\frac{1}{2}$, or $\frac{3}{4}$ man-years) on an aggregate basis. Several accounts rely on sizing both quantitatively and qualitatively by extrapolating historical utilization rates. The reliance on historical data heightens the importance of systems supplying the data. Competing sources of data (Manpower and Personnel Information System (MAPMIS) and Defense Finance and Accounting Service (DFAS)) lead to debate, confusion, and validation of utilization rates. Beneath the data are counting methodologies that are critical to account sizing and execution reporting.

IA Category Analyses

It is useful to approach the category analyses from a planning, programming, and budgeting perspective with regard to manpower considerations. Personnel considerations are best viewed as program execution issues.

Planning, Programming, and Budgeting

Personnel are categorized in the Navy's TPPH account using category definitions that appear inconsistent with DODI 1120.11. By DOD policy, the Holdee account consists of three accounts: Patients, Prisoners, and Separatees. The Navy eliminates the tiered Holdee account and categorizes the Separatees account as Holdees. In addition, within the DODI 1120.11 definitions, Transients are defined as those under Permanent Change of Station (PCS) Orders. In bundling the TPPH and then shredding it as en route and Temporary Duty (TEM DU), the Navy sweeps certain TEM DU (not in training) categories into the Transient account. While these personnel are between permanent duty stations, they may not be under PCS orders for some varying length of time, creating a category of TEMPDU transients that appear to be inaccurately identified in program and budget. While it could be argued that this is simply an immaterial zero-sum categorization anomaly, there are some budget and program impacts. The Transient and Holdee accounts have separate program elements. Packaging a group not under PCS orders into Transients may result in a profile that compares unfavorably to PCS and Transient resources of the other services. Also, the approach may mask the categorization of members that should be excluded from the Individuals Account entirely since they are available to a commander or commanding officer for the performance of a force structure mission.

Program Execution

In program execution the Accounting Category Code (ACC) data field of the Enlisted Master File (EMF) is used to account for personnel. As personnel are brought onto active duty and ordered from place to place, the On Board ACC field of their personnel record in the Enlisted Master File (EMF) is updated to reflect the nature and status of their assignment. There are other ACC fields in the record for past and future ACCs assigned to a member.

The relationship of ACCs to Navy and DOD categories of the IA is summarized in Figure 3. To some extent the accounting reaches a level of detail to meet the needs of personnel management and distribution that exceeds that needed to account to DOD and Navy Individuals Account categories.

Navy ACC Group	Navy IA Category		DOD IA Category	
400 In Transit	Transients	En route	Transients, Trainees	
320 For Further Assignment		TEM DU	No comparative provision.	
330 For Further Transfer				
351 Failed to Report for TEMPDU				
352 Commissioning & Fitting Out				
354 HUMS < 6 months				
355 Awaiting Med BD Review				
356 Disqual, Pending Evaluation				
341 TEMDUINS <20 wks	Students, Trainees		Students, Trainees	
342 TEMDUINS >20 wks				
340 TEMDUINS <20 wks - Recruit	Trainees		Trainees	
370, 1, 2, 3 Treatment, Hospitalized	Patients		Holdees	Patients
390, 1, 2, 3 Discipline status, confined, appellate review	Prisoners			Prisoners
380, 1, 2 Pending Sep, Discharge, Release, Retirement, Admin Board	Holdees			Separatees

Figure 3. Individuals Account Mapping.

For example, four ACCs associated with treatment at medical facilities and in hospitals equate to the IA category of Patients within the overall Holdee account category. The detail within the different Patients' ACCs allows personnel and medical managers to track members who are in civilian and other services facilities. The first two positions of the ACC (37_) detail is sufficient to categorize members as Patients within the Holdee account.

In other areas the ACCs are insufficiently discreet. The ACC 400, Transients, is an example. When a Transaction Accounting Code (TAC) 600 change is applied to a member's record, the EMF system generates an On Board ACC change to 400 (transient status). The On Board ACC continues to reflect the Transient status until a gain TAC applies a replacement ACC to reflect the member's status at the gaining activity, e.g., ACC 100 is Duty and would represent a typical situation where a member checks aboard a ship for a normal tour of sea duty. Also, per DOD policy, a Transient must be under PCS orders. The Trainees should never enter into Transient status until making the final move from the training pipeline to the first permanent duty station.

ACCs with 34 in the first two positions are training or temporary duty under instruction (TEM DUINS) identifiers. ACC 340 is exclusive to recruit training and therefore clearly maps to the Trainee Individuals Account category. ACCs 341 and 342 do not differentiate a

Trainee from others that are undergoing training (students). After recruit training, a variety of logic and other EMF data fields must be employed to track a Trainee to the first permanent duty station. A Trainee ceases to be a Trainee when completing the last course of instruction and initiating transfer as a Transient to the first permanent duty station.

The Navy use of the term Holdee is too specific in that it is a substitute for Separatees and masks the fact that Patients and Prisoners are also Holdee accounts. For some management purposes, the Navy groups accounts as Transients, Patients, Prisoners, and Holdees (TPPH) and Students for Students and Trainees. This occurs in billet authorizations with respect to manpower management and in a variety of aggregations for personnel management. This appears harmless so long as bona fide categories are used in the grouping. However, there are instances where such is not the case. For example, the OPNAVINST 1000.16J, Paragraph 400.1.a, in discussing TPPH sizing methodology, constructs a case for TEMDU TPPH that includes the 320 and 330 ACCs. Related headquarters briefing materials include the 35x ACCs in the TEMDU Transients category. Other examples include tracking and status reports such as the Transient Monitoring Unit's Navy-wide Enlisted Transient Status, that include all non-distributable personnel under the category of Transients and Limited Duty which is not within a category of the IA.

Summary

A review of IA category definitions and structure reveals:

1. The Navy's accounting practices are not in strict compliance with DOD policies.
2. The logic used in the Navy's data system for tracking personnel between accounting codes (ACC) is faulty.
3. The Navy's use of IA terminology is internally inconsistent.

Breadth of Categories

Fundamental Concepts

As an initial step to examine the adequacy of the breadth of the IA categories, it is necessary to review the underlying concepts of the IA that are summarized in Figure 4. These concepts establish the framework for determining what should and should not be included in the Individuals Account.

Active duty military counted and reported as part of active strength

- Count from the effective date of the gain action
 - Date of enlistment
 - Reporting for active duty
 - Return to military control
- Count until the effective date of the loss action
 - Separated
 - Released from active duty
 - Retirement
 - Death
 - Lost from military control - POW, MIA, Deserters (+30 days), Prisoner (long-term)

Comparable effective date procedures apply to changes of status within military strength

- Transfers between and among force structure units and Individuals accounts

Services accounting and programming practices shall be internally consistent and supportive of DOD procedures

Individuals includes

- Those military personnel (active, countable strength) not in force structure

Force structure includes

- Personnel unavailable to perform mission-related duties whose availability for duty is controllable, directly or indirectly, by a unit, installation, or senior local commander including
 - Leave while assigned to the unit
 - Additional duties or details
 - Sick call
 - Short-term hospitalization (<30 days for sea duty)
 - Non-mission related local training
 - TEM DU for skill progression training, professional military education with return to unit

Figure 4. IA Concepts.

The core concept is that of availability.⁵ For example, the definition of the transients category states, “All military members who are not available for duty ...” (DODI 1120.11, section 5.2.2.1). And again, “Personnel who are not available for duty ...” (DODI 1120.11, section 5.2.2.1). Holdees are characterized by differing types of non-availability including medical non-availability, disciplinary non-availability, or pre-separation non-availability (DODI 1120.11, section 5.2.2.5). The member is in force structure if availability is controllable, directly or indirectly, by a unit, installation, or senior local commander. It is straightforward to determine that those in the accession training pipeline and those executing PCS orders are not in the force structure. More complex are the Holdee accounts that involve personnel who are in force structure and for a variety of reasons transition to Patients, Prisoners, or Separatees. Remarks earlier pointed out that these transitions are sometimes immediate and at other times delayed for varying periods of time.

⁵ An alternate view would place personnel in or out of force structure dependent on the ability to perform the duties and execute the workload of an authorized billet. However, this view does not appear to be directly supported by language in DODI 1120.11.

Assigning members in a “for duty” status who are in conditional transition because of fitness is a test of the “in force structure or in Individuals” distinction. For duty, Limited Duty (LIMDU) assignments are slightly off the mark in meeting precepts of active duty fitness embedded in active duty manpower and personnel systems. Similarly the member assigned under Limited Duty criteria typically will not be on board for a normal tour of duty—a situation that increases personnel turnover in units that accommodate Limited Duty assignments. Management and humanitarian forces converge to make it work despite the contradiction. The accommodation is practiced so long as the Limited Duty numbers are tolerable. Still the very circumstance that would lead to creation of an Individuals category is present in the Limited Duty situation. The member is on board but the availability to perform duties to accomplish the mission of the command may be impaired to varying degrees. One way to view the potential impact of LIMDUs on Navy commands is to equate a command’s mission to a certain level of organizational productivity. The requirements to meet that level assumes having personnel on-board who are able to 100 percent fulfill the productivity requirements of their position. Every time a position is filled with an individual who is not able to meet this level of output the overall organization’s performance is degraded. Either other personnel must increase their level of output or the required output must be reduced. The more constrained the system’s resources are the greater the impact of any particular loss in individual productivity.

In comparing limited duty, ACC 105, to other ACCs for consistent application, the temporary humanitarian ACC 354 is striking. The 354 is among the 35x ACCs that map to the TEMDU transient category as was shown in Figure 3. With humanitarian assignments typically being made to force structure units, a member’s availability is unlike the typical IA situation. This invites the question: if doable for Humanitarians (HUMs), why not LIMDU?⁶

In considering limited duty and other availability limiting circumstances, it is noteworthy that all services are confronted with these issues. In managing assignments within the force structure, these availability restrictions may appear inefficient to a management driven by recruiting, retention, career management, and force readiness along with execution on end-strength and dollars. Within the Navy, these limitations are authorized and imposed by the limited duty provisions of the Military Personnel Manual (MILPERSMAN).⁷ Statutes and DOD directives govern Physical Evaluation Boards (PEBs); and lower level medical boards foster temporary limited duty assignments that are compatible with the member’s ability to perform duties and remain in the force structure. Pregnancy is, by SECNAV policy,⁸ not an availability-limiting event unless there are complications. In the absence of compelling rationale to expand the IA and further increase the cost of doing business, services must efficiently and effectively manage availability-limiting restrictions on their personnel.

BUMED officials having cognizance over aspects of the limited duty designations have the view that members want to get rehabilitated and on with their careers and their view is that the system is oriented to those objectives. In discussing some 1998 thesis

⁶ The most practical response is that adding LIMDUs to the IA would be cost prohibitive, and it can be argued that HUMs should be considered as LIMDUs are considered, that is as personnel assets with some duty-limiting circumstances.

⁷ <http://www.bupers.navy.mil/cdrom/dev/cd/MILPERS/Milpers.pdf>

⁸ http://nedb.nebt.daps.mil/Directives/1000_10.pdf

recommendations⁹ on limited duty, regarding the need to restructure certain divisions within the Navy organization, these officials seemed comfortable with the communication and integration on medical boards and limited duty matters. It was noted that the statutory nature of the SECNAV PEB involves to some extent, an independence and autonomy that must be accommodated. Regarding a recommendation from the same report, to improve information and tracking capabilities, it appears the Medical Board Tracking System (MBTS) and the Joint Disability Evaluation Tracking System (JDETS) will not soon support the information needed to improve the knowledge and extent of medical board activity and interface with the personnel systems. Insofar as immediate steps that may be helpful, BUMED officials pointed to a Marine Corps initiative¹⁰ as a measure with potential for improved efficiency and effectiveness.

Expansion or contraction of the IA, through category changes or composition, shifts manpower and members that are currently counted in structured units out of those units and into the IA or vice versa. At current levels for officers and enlisted members, the Navy has robustly sized its IA as is shown in Figure 5.

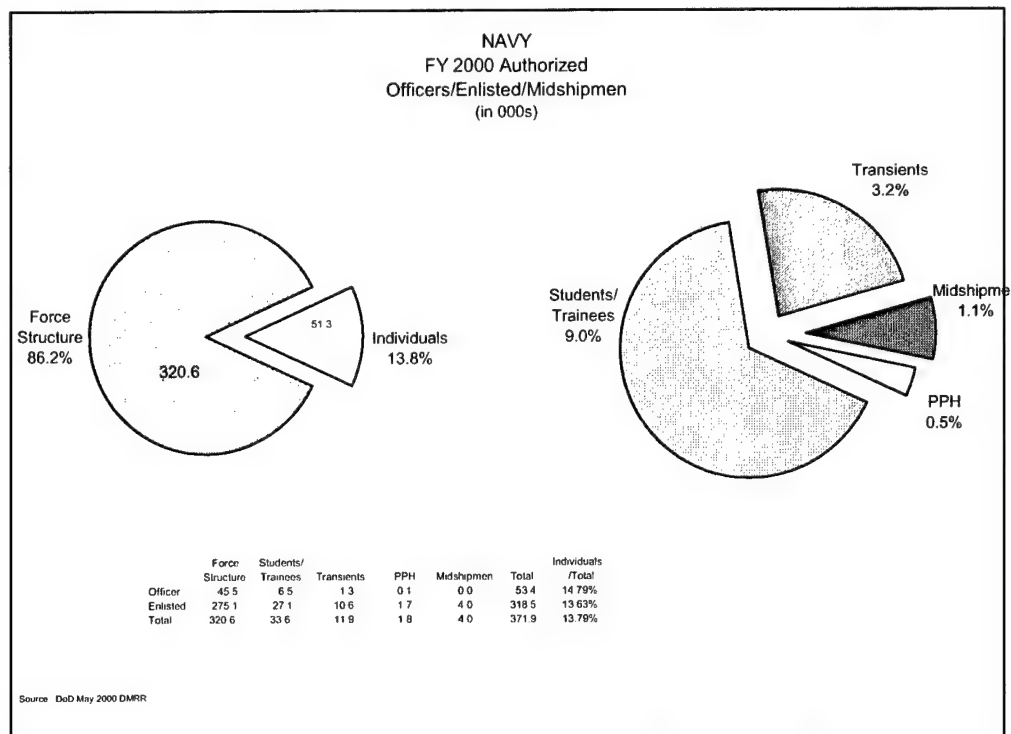


Figure 5. Navy Individuals Account.

In the case of the enlisted, Navy has 275.1 thousand in force structure and 39.4 thousand in the IA (excluding Midshipmen) which is about 12.5 percent of the total enlisted strength. This compares with Air Force at 6.8 percent and Army at 11.6 percent. Put another way, for every seven Navy members in force structure, there is one in the IA. These comparisons

⁹ Keenan, M.D. & Wilkins, G.M. *Disability Evaluation System and Temporary Limited Duty Assignment Process: A Qualitative Review*. Naval Postgraduate School, March 1998.

¹⁰ MCBUL 1850 LIMITED DUTY AND DISABILITY PROCESSING

suggest that a Navy initiative to expand the IA would be a most challenging undertaking. In addition, conversations with officials having cognizance over manpower and personnel policies in the Office of the Secretary of Defense (OSD) indicate that there is an ongoing effort to consolidate and overhaul the manpower and personnel accounting directives including the DODI 1120.11 and those applicable to the Defense Manpower Requirements Report (DMRR). Eventually this will require service participation for review and concurrence. An overhaul of this nature has potential to alter the status quo and a service initiative to fine tune existing categories would need careful management and integration. Another matter of continuing concern is the best use and allocation of end-strength. In an environment of increasing risk for end-strength attainability, additional strength devoted to the IA is strength not available to force structure. The resource bundling necessary to support, justify, and defend force structure programs must include the manpower. Assuming that end-strength is held constant any effort to expand the IA must come at the expense of reduced programmed manning (billet authorizations as compared to the manpower requirement) or force structure (hardware).

Summary

A review of the categories of personnel in the IA reveals:

1. The Navy has a larger IA then the Army or Air Force.
2. There are similarities between humanitarian assignments and LIMDU assignments that would argue for LIMDUs and HUMs to be accounted for in the same manner..
3. There may be data systems opportunities for improving the efficiency of LIMDU processing between BUMED and personnel systems.

Accuracy

Counting (Logic)

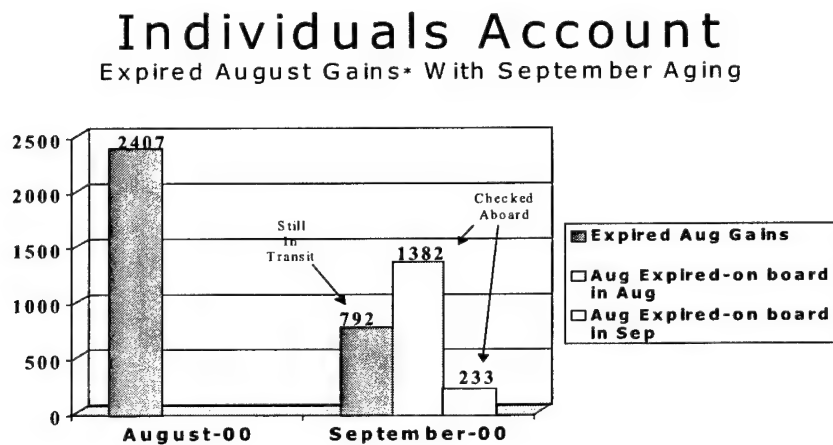
Once it is determined that the count should be as active duty strength, it must be decided if it is in force structure. If not in force structure, then it is in the IA. The particular account to be credited within the IA is conditional but in following the logic it must be in one of the Individuals accounts. Pragmatic top down application of the logic is to ask not if a member is in Transients or Trainees but rather is the member counted as active duty strength and if yes, then is the member in or out of force structure. If the answer is out of force structure, then iterate through the conditions to determine the specific IA to which the member belongs. In determining if members are in force structure or in the IA, those assigned to regular units in a "for duty" status are not a problem—they are in force structure. The difficult determinations are those in which members are in some sort of transition.

Then there is the case where a member is being counted in force structure but is not actually in force structure. An example of this "ghost in force structure" is the case where a member is absent from the duty station and embarked upon a transition for which a ticking clock or a judgment is needed to complete the transition. The patient and discipline

categories are noteworthy and illuminate the diffuse line that is drawn between being in force structure and not being in force structure. The issues being balanced here are the need to avoid chaos in personnel management and distribution, and the need to maintain the personnel component of unit readiness. Required states or conditions of unit readiness in turn are variable to some extent by employment schedule and defense conditions.

System Counts

Examination of enlisted expired prospective gains reveals that enlisted Transients may be overstated in excess of 1,000 on a regular basis in reports and briefings. In using the ACC field to sum the number of members in Transient status, the tally includes personnel who should have reported into the gaining activity but are still showing as Transients. By reviewing the status of these members a month later it is possible to discern when they reported to the gaining command and also, the date that they were received at the gaining command. August 2000 data with September aging is summarized in Figure 6. The data indicate that a majority of expired prospective gains were actually on board in August and that about 10 percent more reported on board in September. See Appendix D for the methodology and final output data.



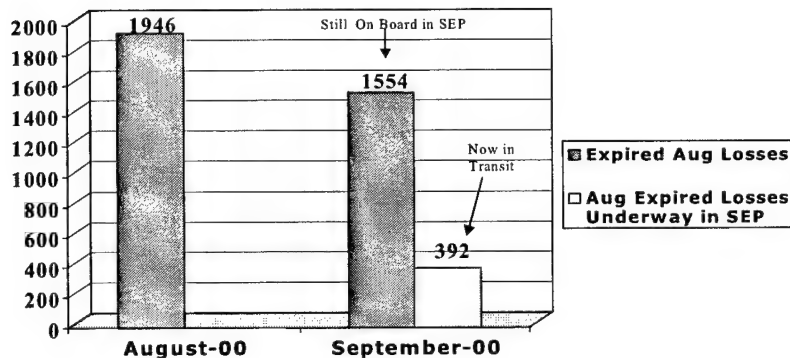
* Gains are enlisted active duty USN countable strength

Figure 6. Aged Expired August Gains.

A comparative examination of prospective losses reveals a similar but muted profile. With August 2000 expired prospective losses approximating 2000, the majority of members remained in the losing command when looked at with September aging. About 400 of these losses were in Transient status in September. Figure 7 is a summary of the data.

Individuals Account

Expired August Losses* With September Aging



* Gains are enlisted active duty USN countable strength

Figure 7. Aged Expired August Losses.

Summary

In summary a review of the data system counts reveals that there are significant lag times between real world events and the personnel system's recognition of those events leading to an inaccurate picture of the current personnel situation.

Quality

Fully integrating the IA concept into the manpower and personnel systems as well as into the management practices is an essential element of effective implementation. In order to smoothly execute the program, the aggregate numbers in the IA must be in balance with the numbers in force structure. Permanent Change of Station (PCS) moves, accessions, training loads, and policies that impact the various accounts within the IA affect the balance. To achieve full implementation the IA numbers must be disaggregated along qualitative lines. Active duty personnel are developed, managed, and distributed by skill, pay grade, and other qualifications that are needed to accomplish military missions. For effective implementation, the balance between force structure and the IA must be in place for individual skill tracks.

To appreciate the importance of quality, consider an active duty force totaling 2000 (end-strength) and consisting of two skills (gunners and machinists) with 1000 in each skill as is depicted in Figure 8. With the IA at a nominal 14 percent, there would be 280 ($0.14 \times 2000 = 280$) in the IA and 1720 in force structure. In developing personnel inventory, the demand by skill must include the portion for the IA. With 1000 members in each skill it will be feasible to fully man the 860 billet authorizations for each skill in the force structure and accomplish the training, rotation, accession, separation, and other things needed to properly manage the personnel inventory.

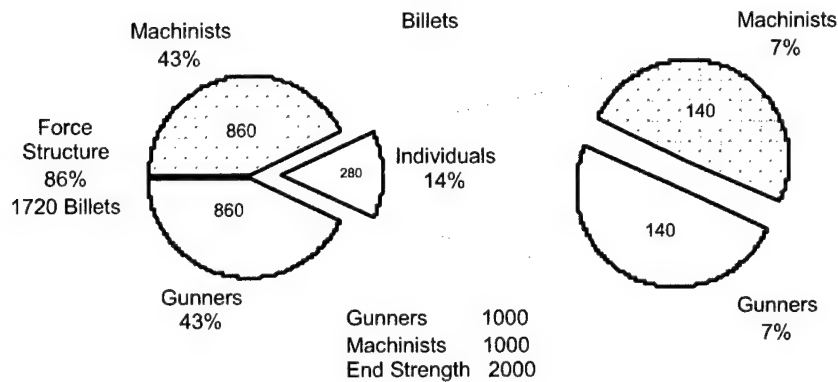


Figure 8. Example of qualitytization.

Now consider the consequence of getting it wrong. There appear to be two approaches for allocating quality to the IA. In one approach, the manpower system contains accounts for the IA at the billet authorization level and billets are written to the level of Future Years Defense Plan (FYDP) controls. In the other approach the IA quality is introduced directly as a model input without the use of the billet authorization portion of the manpower system. For this example, assume that the IA has billet authorizations. Now suppose instead of having 140 gunners and 140 machinists earmarked in the IA, the number is 70 gunners and 210 machinists (still 14% and 280 in the IA) as shown in Figure 9. The systems will develop an inventory of 930 gunners and 1070 machinists.

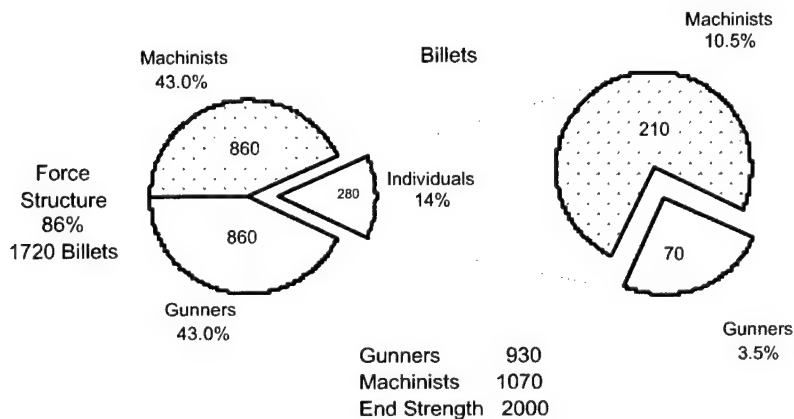


Figure 9. Example of qualitytization.

To appreciate the consequences of the quality being out of balance between force structure and the IA, Figure 10 shows the distribution of personnel into the qualitatively altered IA with no quantitative or qualitative change to force structure that was presented in Figure 9. Imbalances like these result from programmatic changes in the force structure or from inventory driven factors such as changes in continuation rates.

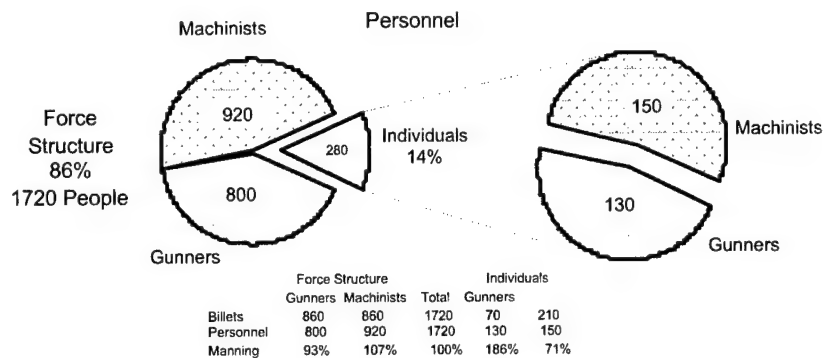


Figure 10. Example of qualitzation.

For gunners it becomes an issue of managing the shortage. If the 14 percent utilization of the IA continues, there will be 130 gunners in the IA and the remaining 800 will be available to fill the 860 billet authorizations in force structure. Gunners will be manned at 93 percent ($800/860 = .93$). If the abundance of machinists were able to backfill the gapped gunner positions the numbers would look good even down to the unit level. But if there were only two units, one having only gunner authorizations and the other having only machinist authorizations and skills could not be substituted, then the under manning and over manning would be present at the unit level. In this example a critical assumption is that the 14 percent utilization of the IA will continue after the provision for gunners in the IA has been halved. This is a reasonable assumption since no Service actively manages the IA directly and personnel management activity will continue without regard to over subscription to the IA.

The preceding highly simplified example points out the need to organize and manage quality within the numbers. In practice, management of quality is a complex undertaking. Some skills have higher utilization of the IA than others because of longer training pipelines or more formal schools for career development. Generic apprentice skills flow into a number of specialized skills. Some skills are compressed with others at higher pay grades. Also, there are seasonal variations in total strength and IA utilization that impact manning levels in the force structure that may amplify or mask a fundamental IA balance problem. Authorizations sometimes call for general military qualifications and can be filled by cross-detailing members from other specialized skills. Still, given all the complexity in managing the active duty force, it is most helpful to focus on fundamentals such as the qualitative balance between force structure and the IA. Effective treatment and management of the qualitative balance and other identifiable fundamentals should eliminate avoidable problems and contribute to achieving force structure manning in the skills and grades of the billet authorizations. To strike the right force structure to IA balance, collection and analysis of historical utilization of the IA on a qualitative basis must be undertaken. Even if the IA is sized incorrectly on a quantitative basis, it is advantageous to methodically distribute surpluses or shortages among the various skills. Knowledge of the utilization experience must then be applied to future force structures to maintain qualitative balance. Similarly,

programming factors derived from accession, training loads, and Permanent Change of Station (PCS) experience should be applied qualitatively to the extent feasible.

Recommendations

1. Ensure that accounting and programming practices be internally consistent and compliant with DOD procedures.¹¹

Change all reference and use of Transients, Patients, Prisoners, and Holdees (TPPH) to Transients and Holdees (TH). The Holdees account would be further divided into Patients, Prisoners, and Separatees subcategories.

Establish an N1 working group to decide on the appropriate IA category for the Navy's TEMDU Transients that is consistent with DOD policies.

Ensure that manpower and personnel instruction materials make clear the uses of the Individuals accounts and of the need to communicate clearly regarding these accounts in correspondence, reports, and briefings.

2. Improve the timeliness and accuracy of accounting for personnel.

Establish an N1 working group to decide: 1) responsibility for management of ACC code structure; and 2) the business rules required by N1 data systems to clearly differentiate and track personnel as they move through the various ACC categories.

Apply transactions as they occur and ensure real-time system updates are available to managers.

3. Perform a day-to-day tracking analysis of the personnel and pay data systems to identify discrepancies in how personnel are categorized into accounting codes with particular emphasis on the transient-trainee/student codes. This analysis would use one year of recent personnel data.
4. Ensure a proactive, effective Navy representation in any OSD effort to revise policy, categories, or composition of these accounts.
5. Ensure an effective and efficient organization, policies and procedures to minimize the impact of internally accommodated programs for members whose availability, although limited, is sufficient for continued force structure assignments.
6. Reorganize management of the IA to foster closer coordination between the Trainees and TPPH accounts as well as the process of qualitzation.

¹¹ Buckley, R., Mosteller, J., Pinciario, S., Shurmeier, D., & Su, Y. (1990). *Analysis of the Individuals Account for Officers*. (NPRDC-TN-90-8). Navy Personnel Research and Development Center, San Diego, CA.

Appendix A: Policy

The Services are bound by common policy, procedures, and terminology in providing for and managing the active force. Identification and understanding of this policy is a necessary preparation for analyzing the systems used by each of the Services. For purposes of reviewing policy pertinent to the IA there are four interrelated areas of interest.

Primary Guidance

DODI 1120.11 is the overarching guidance for standardizing policies, procedures and definitions for active duty manpower accounting. Policy on programming and accounting for active military manpower addressed in DODI 1120.11 (April 9, 1981) identifies the IA as the group of military personnel on active duty and not in force structure. As defined, Figure A-1 graphically depicts the make up of the IA and the naming conventions that are to be used by all Services. A combination of Program Elements (PEs—also called Program Element Codes (PECs)) and Resource Identification codes (RICs) are used to relate manpower and personnel to the various IA categories.

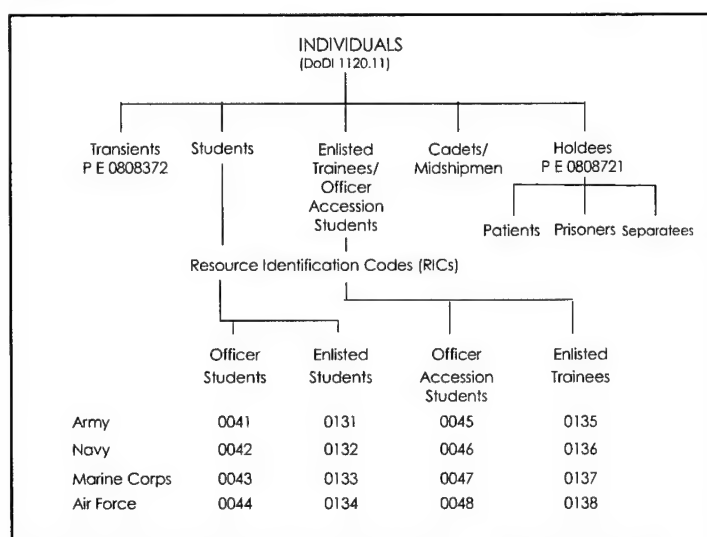


Figure A-1. Individuals (DODI 1120.11).

Examination of Navy Officer and Enlisted Programmed Authorizations (OPA/EPA) documents of the past 40 years shows that personnel holding accounts were employed from 1967 forward and Students first appeared in 1981. As an example of specific use, a Navy directive, NAVCOMPT Instruction 1080.1A of March 17, 1982 addresses monthly reporting of active duty military personnel strength and invokes DODI 1120.11 as definitional for counting and reporting active strength.

Planning, Programming, and Budgeting System (PPBS)

Other DOD Directives (DODDs) and Instructions (DODIs) reinforce standardization of manpower accounting. DODD 7045.14 of May 22, 1984 (with Change 1 of July 28, 1990) and DODI 7045.7 of May 23, 1984 (with Change 1 of April 9, 1987) both address the Planning, Programming, and Budgeting System (PPBS) and require the Services to use the System. A supporting handbook, DOD 7045.7-H (FYDP Program Structure Handbook),

includes specifics related to manpower and personnel. The extract at Figure A-2 is noteworthy in that it cites end-strength as the basis for the manpower counts in the FYDP.

DOD 7045.7-H, February 2000 Page 17
2. Manpower Relationships to FYDP Programs
Military Manpower.
Military manpower is enumerated in end-strength, as of the end of the fiscal year for which resources are recorded in the FYDP. End-strengths are normally aggregated directly into program elements based on the program element identification of each unit. Unstructured spaces (trainees, transients, patients, prisoners, and students) are computed based on anticipated gains and losses and authorizations for units in all FYDP programs.

Figure A-2. Manpower Relationships to FYDP Programs.

From discussions with the Services' representatives it is apparent that increasing attention is being directed to average strength or man-years as an alternative accounting method for active strength. Still, end-strength is the basis for FYDP accounting and remains policy. Changes of this nature would have far reaching implications. For example, the extract at Figure A-3 shows the pervasiveness of FYDP data.

DOD 7045.7-H, February 2000 Page 19
By statutory requirement, the President's Budget publication of: the FYDP, the USD (Comptroller) Procurement Program, and the OUSD (Comptroller) RDT&E Program, all containing the prior, current, and four out-years, are provided to various Congressional oversight committee staffs and the Congressional Budget Office (CBO). The CBO has developed a Defense Resource Model (DRM) for use as an analytical tool in support of alternative levels of defense resources. Following the budget submission to Congress, budget year data are extracted from the FYDP according to CBO specifications, which aggregate program elements and resource identification codes to unclassified summary levels for input to the DRM. Data from the DRM are used by CBO to fulfill the legal requirement for mission-oriented displays under P.L. 93-344 (reference (b)).
Note: Reference (b) is 2 U.S.C. 601-66 1, "Congressional Budget and Impoundment Control Act of 1974," July 12, 1974.

Figure A-3. Extract from DOD 7045.7-H of February 2000.

Within the Handbook, specific Program Elements are identified and defined including 0808721N (Personnel Holding Account) and 0808732N (Transients) as well as a number of training-related Program Elements that include Student and Trainee manpower.

The Personnel Holder Account definition in the Handbook differs from DODI 1120.11 in that the Instruction is more specific and includes cases (efficient personnel management and operational readiness of a ship) not cited in the Handbook. Common language includes dropped from assigned strength of an operational or training (in the Handbook) unit, or a force structure (in the Instruction) unit and attached to a holding activity for reasons of medical, disciplinary, or pre-separation non-availability.

Transients' definitions in both the Handbook and the Instruction generally agree although the Handbook culls out definitions of the various types of PCS moves and crops the exclusions related to trainees. Synthesized, a Transient is a member executing a PCS or no-cost (with en route leave or temporary duty) move except when the member is: (1) on temporary duty under instruction (counted as Student) or, (2) an accession (counted as Enlisted Trainee or Officer Accession Student) until making the final move to the first permanent duty station (this is counted as Transients). Under this policy, an initial entrant going through boot camp then taking leave and travel to an "A" School would be counted at all times as a Trainee. For the move from "A" School to the first permanent duty station the member is to be counted as a Transient.

Budget

Budget formulation and submission is a significant area of policy. Much of the guidance for formatting and submitting manifests in the Services Budget Justification of Estimates for each requested appropriation. Of interest here is the Military Personnel Appropriation and, to a lesser extent, the Operations and Maintenance Appropriation. The Military Personnel Justification of Estimates for each of the Services approximates 150 pages of standardized, detailed explanation of items within budget activity categories. The detail is shown for actual personnel in the expired fiscal year. The strength planning outputs are shown for the execution and budget years. Collectively the Justification of Estimates has much evidence of the IA related activity. Details on Permanent Change of Station (PCS) and training loads as well as accession levels are factors influencing the size of the IA. Still there is no separate, specific justification of the IA or any of the accounts within the IA. The Military Personnel Justification of Estimates also shows the monthly and annual average strength by commissioned officers, cadets and midshipmen, and enlisted as well as the end-year strengths that lock the manpower and personnel systems together. Underlying the end-strength, there is a close relationship between manpower and personnel on qualitative matters such as skills and grades.

Defense Manpower Requirements Report (DMRR)

The Defense Manpower Requirements Report (DMRR) outlined in DODI 1110.1 mandates Service participation in assembling a report to Congress as required by Title 10, United States Code Section 138(a)(3).

Since 1981, legislation for the congressional reporting requirements has been eliminated, revised, and updated. The current language for the reporting requirements is in Title 10 United States Code Section 115a and quoted in Figure A-4. Note that subsection (a) requires the report within 45 days of the submission of the President's Budget and subsection (c) is specific to justifying support and overhead manpower. Previously the report was due to the Congress on February 15. The two most recent Defense Manpower Requirements Reports submitted to the Congress were dated June 1999 for Fiscal Year 2000 and May 2000 for Fiscal Year 2001.

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[Laws in effect as of January 6, 1999]
[Document not affected by Public Laws enacted between
January 6, 1999 and April 7, 2000]
[CITE: 10USC115a]

TITLE 10--ARMED FORCES

Subtitle A--General Military Law

PART I--ORGANIZATION AND GENERAL MILITARY POWERS

CHAPTER 2--DEPARTMENT OF DEFENSE

Sec. 115a. Annual manpower requirements report

(a) The Secretary of Defense shall submit to Congress an annual manpower requirements report. The report, which shall be in writing, shall be submitted each year not later than 45 days after the date on which the President submits to Congress the budget for the next fiscal year under section 1105 of title 31. The report shall contain the

Secretary's recommendations for--

(1) the annual active-duty end-strength level for each component of the armed forces for the next fiscal year; and

(2) the annual civilian personnel end-strength level for each component of the Department of Defense for the next fiscal year.

(b)(1) The Secretary shall include in each report under subsection (a) justification for the strength levels recommended and an explanation of the relationship between the personnel strength levels recommended for that fiscal year and the national security policies of the United States in effect at the time.

(2) The justification and explanation shall specify in detail for all major military force units (including each land force division, carrier and other major combatant vessel, air wing, and other comparable unit) the following:

(A) Unit mission and capability.

(B) Strategy which the unit supports.

(3) The justification and explanation shall also specify in detail the manpower required to perform the medical missions of each of the armed forces and of the Department of Defense.

(c) The Secretary shall include in each report under subsection (a) a detailed discussion of the following:

(1) The manpower required for support and overhead functions within the armed forces and the Department of Defense.

(2) The relationship of the manpower required for support and overhead functions to the primary combat missions and support policies.

Note: More subsections are contained in this section.

Figure A-4. Excerpt from Title 10, US Code 138(a)(3).

Appendix B: The Services

This section discusses pertinent aspects of the Services' approach to active duty manpower and personnel and the IA. In some cases comparative data was not available or not reported in seemingly standardized reporting formats. For example, the Marine Corps and the Navy include monthly accessions in the budget justification of estimates. The Air Force and the Army omit monthly accessions in the budget justification of estimates. In order to ease direct comparison for subsequent discussion enlisted Non-Prior Service (NPS) accessions are summarized in Figure B-1.

Enlisted Non-Prior Service Accessions (FY 2000 in Thousands)					
Service	NPS Accessions	Attrition Adverse	Attrition Other	Total Attrition	Attrition/ NPS Acc
Air Force	34.0		13.6	13.6	40.0%
Army	69.5	18.2	22.0	40.2	57.8%
Marine Corps	33.4	4.0	9.3	13.3	39.8%
Navy	51.2	10.3	16.6	26.9	52.5%

Figure B-1. Enlisted Non-Prior Service Accessions.

The number of Permanent Change of Station (PCS) moves is an important element in sizing the Transients portion of the IA. Recall that from the DODI 1120.11, the Services are required to develop programming factors for PCS and Transients to include methodologies used to develop end-strength estimates. Since a Transient must by definition be in a PCS status it follows that the number of PCS moves should significantly relate to Transients end-strength estimates. To ease comparison of the PCS move activity, the Fiscal Year 2000 PCS moves by Service, officer, and enlisted are summarized in Figure B-2 below.

PCS Moves (FY 2000 in Thousands)						
	Accession	Training	Operational Officer	Rotational	Separation	Total
Air Force	5.5	6.4	9.0	7.3	5.8	34.0
Army	6.4	5.8	6.1	8.1	5.8	32.2
Marine Corps	1.7	1.5	1.5	1.0	1.7	7.4
Navy	5.3	6.1	6.5	4.9	5.1	27.9
Enlisted						
Air Force	36.5	4.1	10.5	40.2	38.4	129.7
Army	76.7	3.2	17.7	61.9	74.3	233.8
Marine Corps	33.4	2.1	10.8	14.7	33.1	94.1
Navy	56.8	11.4	25.8	18.9	47.6	160.5

Figure B-2. PCS Moves for FY2000.

Air Force

Manpower

The HQ USAF Manpower Data System (HAFMDS) incorporates the Future Years Defense Program (FYDP) system to account and program active duty manpower, including manpower for the IA. This system is the source of changes (deltas) to the Manpower Data System (MDS) used by the Major Commanders (MAJCOM). The Manpower Data System contains the FYDP base and associated manpower authorizations. MAJCOMs make adjustments to bring authorizations into agreement with FYDP. Of significance, the IA FYDP numbers in HAFMDS are not downloaded to MDS and no manpower authorization quality (skills, pay grades, and other details) exists within the manpower systems for the IA. Also, it is feasible for MAJCOMs to overwrite and underwrite manpower authorizations in MDS—a situation that necessitates reconciliation and adjustments to arrive at a qualitative statement controlled to end-strength. The MDS houses all documented manpower requirements so it is usually a simple matter of applying an authorization to the established requirement. In this regard it should be noted that, quantitatively, requirements are derived through dividing workload man-hours by man-hour availability factors. The calculation yields the number of members needed to perform the workload. In establishing the normal, Continental and Outside Continental United States (CONUS/OCONUS), 5 days/week, 8 hours/day, 40 hours/week availability, 10 holidays are backed out and then a group of non-available hours are deducted. The group includes leave, Permanent Change of Station (PCS) related, medical, organizational duties, and education and training. As a result the normal availability imbedded in a manpower requirement is 1818 hours per year.

To size the IA accounts for Program Objectives Memorandum (POM), the Headquarters manpower programmer on the Headquarters Director of Manpower and Organization (XPM) staff uses programming factors and information provided by other Air Force organizations. The Air Force Manpower and Innovation Agency (AFMIA) develops programming factors for sizing the Transient and Holdee accounts. The End-strength Team (AF/DPRRE) within the Air Force Deputy Chief of Staff, Personnel organization, provides accession numbers. Using information provided by the Training Command, the programmer applies a typical training time to the accessions to establish the man-years needed for training. The Training Command also supplies the factors needed to size the Student account.

Personnel

The Air Force centrally plans and develops the active duty inventory of personnel. Manpower authorizations from the Manpower Data System (MDS) are used to provide the force structure portion of the qualitative demand statement. The IA portion is added to bring demand to end-strength. The existing personnel inventory is identified through the Military Personnel (MILPERS) Record System and the Personnel Data System (PDS) and provides the starting point for developing future personnel inventories. To illustrate the output of the PDS and the strength planning process, Figure B-3 shows the enlisted profile for Fiscal Year 1999 through 2001. The profile is plotted at monthly intervals with Fiscal Year 1999 showing actual personnel counts.

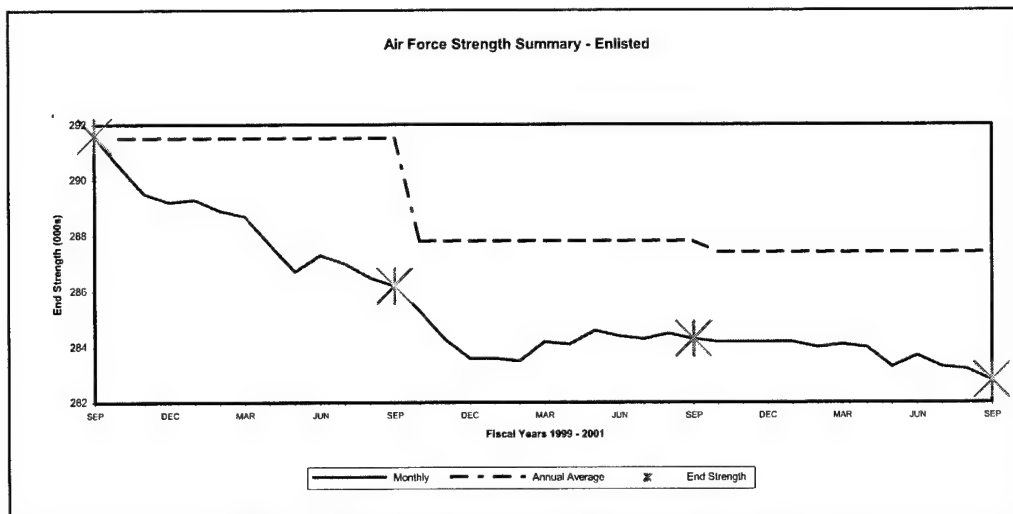


Figure B-3. Air Force Strength Summary—Enlisted.

The profile is remarkably smooth and exhibits few effects of seasonal fluctuations from strength plan management and accession phasing. Note that the Air Force planned for 34,000 accessions in Fiscal Year 2000, or about the same number as the Marine Corps (which has one-half the enlisted end-strength of the Air Force). Reduced accessions mitigate the seasonal perturbations in total strength and contribute to a smooth profile. Average or work-years is significantly above the monthly strengths and end-strengths because of the Man-day Program. The Man-Day Program was 3,400 man-years for enlisted in Fiscal Year 2000. The Man-Day program supplements the active duty strength to perform surge or emergent work that is not defined within the documented manpower requirements. The Man-Day Program is staffed by Air Force Guard and Reserve personnel for periods of active duty typically less than 140 days. These personnel are included in the man-years but not counted in the monthly and annual end-strengths.

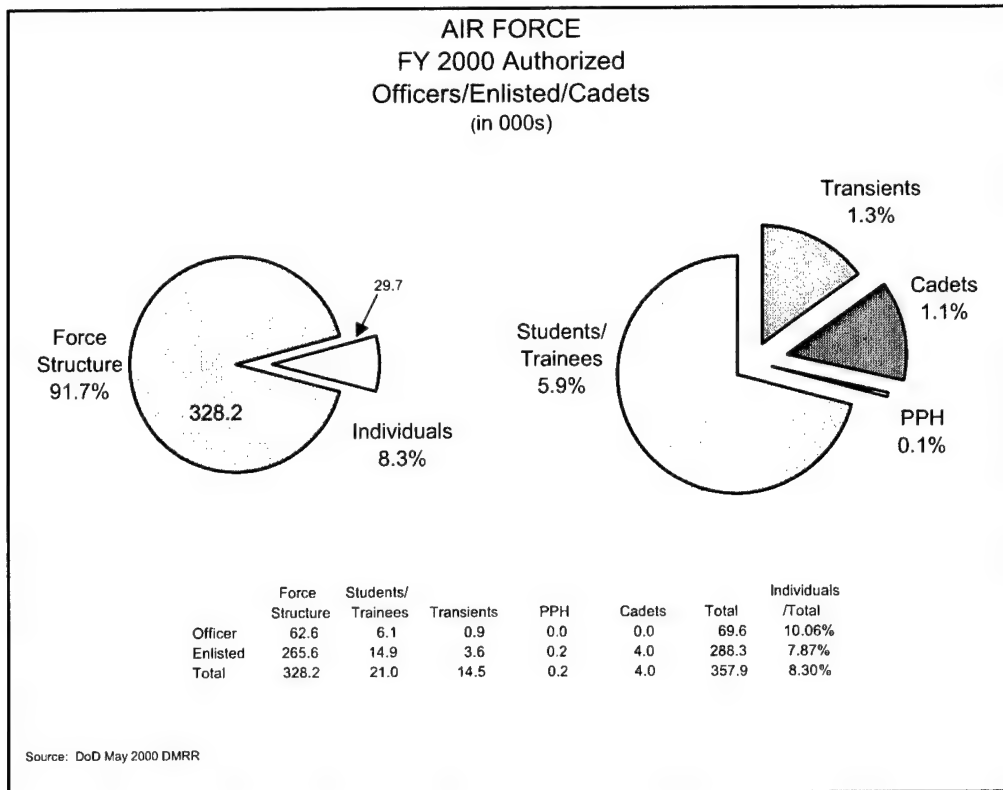


Figure B-4. Air Force FY2000 Authorized Officers/Enlisted/Cadets.

The Air Force presents an extraordinarily efficient balance between the IA and force structure with 8.3 percent of end-strength devoted to the IA in Fiscal Year 2000 as is indicated in Figure B-4. With the exception of Cadets, the Air Force exhibits the leanest utilization of the IA of all of the Services. The 2000 end-strength is exclusively enlisted in the Patients, Prisoners and Holders (Separates) account. This suggests that officers expend less than 50 man-years in the combined Patients, Prisoners and Holders Program Element (PE).

The size of Students and Trainees is no doubt related to the relatively small number of accessions. Transients appear to support about an average 10 days per move. Both the officer (34,000 moves * 10 days = 340,000; 340,000/365 = 931.5 man-years) and enlisted (129,700 * 10 = 1,290,000; 1,290,000/365 = 3,534 man-years) transients end-strength approximates the man-years derived from the number of moves and a 10-day average length of move.

Army

The Army uses The Army Authorization Document System (TAADS) to consolidate manpower requirements and authorizations from the Modified Table of Organization and Equipment (MTOE) and the Tables of Distribution and Allowances (TDA) based upon the approved Master Force (M-Force). The MTOE addresses force structure and the TDA details the institutional force that supports recruiting, training, base operations, and other infrastructure activities. The Army Structure and Composition System (PERSACS) provides phased requirements and authorizations for personnel. PERSACS includes grade and Military Occupational Specialty (MOS) level of detail. Through the Army military strength analysis and forecasting organization within Headquarters, the requirement for the IA is determined and maintained in TAADS. A number of methods are used to size the various accounts within the IA. Enlisted Trainees comprise the largest portion of the IA and the account is sized based upon projected accessions as adjusted by the Enlisted Loss Inventory Model—Computation of Manpower Program Using Linear Programming (ELIM—COMPLIP) methodology. Students including Officer Accession Students are sized based upon input from the Army Training Requirements and Resources System (ATRRS). The Army has authorized the IA as indicated in Figure B-5.

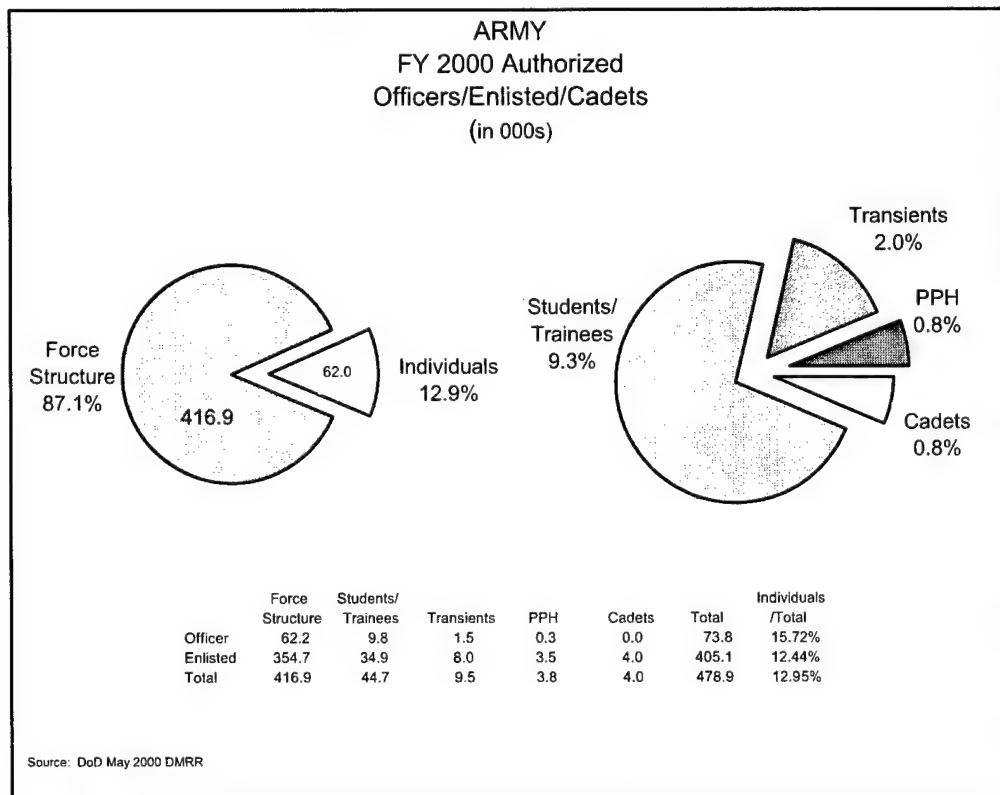


Figure B-5. Army FY2000 Authorized Officers/Enlisted/Cadets.

Appendix C:
OPNAVINST 1000.16J

Chapter 4

SPECIAL MANPOWER REQUIREMENTS DETERMINATION PROGRAMS

400. IA. CNO (N12) performs IA student analysis in close conjunction with resource sponsors and CNO (N13) community managers. CNO (N12) uses a systems analysis approach which provides a defensible technique for the determination of TPPH end-strength and manpower requirements. This approach is generalized into POM projections and manpower qualitzation as follows:

POM Projections (end-strength)

a. TPPH out-year projections are determined by a two-part process comprised of en route and temporary duty (TEMDU) requirements calculations.

(1) TPPH Part 1 Enroute Calculation. Work-year requirements are determined by multiplying the number of budgeted permanent change of station (PCS) move counts times the average elapsed time for each move category. Fiscal year average elapsed time is derived from Defense Finance and Accounting Service (DFAS) data.

(2) TPPH Part 2 TEMDU Calculation. Baseline data is taken from historical DFAS data for personnel accounting category (AC) codes 320, 330, 37X, 38X, and 39X. Historical data is prorated by rating/rate and designator/paygrade, and based on historical execution and a relationship of total Navy end-strength. POM projections are then made based on a correlation of TPPH to total Navy end-strength.

b. Student, Trainees, Cadets, and Midshipmen. Baseline data is taken from the Navy Integrated Training Resources Administration System (NITRAS) including the type of course, resource sponsor, unit identification code (UIC), course identification number, course data processing code, course title, activity, planned requirements, course length, and time-to-train course length. These courses are designated: A, C, D, E, F3, F4, G, P, R, and V.

(1) Time-to-train course length is calculated for each course using NITRAS II historical data. Raw end-strength for each course is calculated by multiplying planned quotas by time-to-train course length (in weeks) and dividing by 52 weeks.

(2) Raw end-strength is adjusted by applying historical execution factors for both officers and enlisted.

(3) Further adjustments are made by comparing training manpower requirements to historical force structure and correlating to project future training manpower requirements.

(4) Outputs are made to the POM by officer and enlisted category.

2. Manpower Qualitzation

a. When the end-strength is determined and manpower requirements are established, manpower authorizations shall be qualitized to match end-strength.

(1) TPPH. Qualitzation is done annually in conjunction with POM projections by using a combination of DFAS data and force structure projections.

(2) Students, Trainees, Cadets, and Midshipmen.

Qualitization is done by using a combination of NITRAS student execution data, DFAS execution data AC codes (340, 341, and 342), and force structure projections.

b. Manpower authorizations serve as the basis for production of the Officer Programmed Authorizations (OPA) and the Enlisted Programmed Authorizations (EPA).

c. Community managers and training requirements planners use OPA/EPA information to determine requirements and accession plans that are entered into NITRAS.

Appendix D: Methodology

Expired Gain Methodology

An expired prospective gain is a member who has an Ultimate Prospective Gain Estimated Date of Arrival (UPG_EDA) that is earlier than the date the Enlisted Master File (EMF) is accessed. For this analysis the focus is on those expired gains in an ONBOARD Accounting Category Code (ACC) of 400. ACC 400 results from a 600 (loss) Transaction Accounting Code (TAC 600) being applied to the members' records in the EMF. The objective is to determine those expired gains that are being counted as Transients (ACC=400) in one month and then look at those same members one month later to determine if they were actually at the gaining activity in the prior month.

Event	Records	Delta	Remarks Regarding the Delta
Take August 31 Enlisted Master File Write-off	403108		
Filter for countable strength (Strength Indicator = "S")	327671	-75437	Not countable/Losses
Filter for USN/MPN Strength (SPI-TAR = " ")	314319	-13352	TARS
Filter for Individuals (ACC not equal 1**)	53536	-260783	Force Structure
Filter for TPPH (ACC not equal 34*)	15641	-37895	Students/Trainees
Filter for Transients (ACC = 400)	10940	-4701	PPH/TemDu Transients)
Filter for Expired Gains-(Estimated Date of Arrival (EDA) <= 8/31/00)	2407	-8533	Transients not yet expired wrt EDA
Take September 30 Enlisted Master File Write-off			
Match above 2.4K Aug Expired Gains with Sep On Board	2407		
Filter those no longer in transit (Sep On Board ACC not equal 400)	1638	-769	Expireds still in transit
Filter those not on board for duty (ACC = 1**)	1615	-23	Expireds not aboard for duty (in 3xx status)
Filter for Aug UPG Activity Name = Sep On Board Activity Name	1598	-17	In 1** in other commands

Expired Loss Methodology

An expired prospective loss is a member who has PCS orders for which the detachment date is earlier than the date the Enlisted Master File (EMF) is accessed, e.g., yr = 0 and month <= Aug (H) for an August 31, 2000 file; and the member is in a for duty status in the monthly file, e.g., he shows as on board USS x, in an Accounting Category Code (ACC) 1xx (he continues to be shown in force structure even though his PCS orders detachment date indicates that he should have departed his present duty stations before 31 AUG).

Event	Records	Delta	Remarks Regarding the Delta
Take August 31 Enlisted Master File Write-off	403108		
Filter for countable strength (Strength Indicator = "S")	327671	-75437	Not countable/Losses
Filter for USN/MPN Strength (SPI-TAR = " ")	314319	-13352	TARS
Filter for under orders in current year (CIC YR = "0" [2000])	31248	283071	Not under orders to detach in 2000
Filter for under orders to detach by now (CIC MO <= "H" [Aug])	24564	-6684	Not under orders to detach prior to August 00
Filter for detachments still not underway (On Board ACC = Like 1**)	1946	-22618	Detachments now in Individuals (Stu/TPPH)

Take September 30 Enlisted Master File Write-off

Match above 1.9K Aug Expired Losses with Sep

Filter for those still on board (Sep On Board ACC = Like 1**)

1946

1554 -392

Expired losses that have gotten underway

Note that the detachment year is the single, last position of the calendar year and the month is represented by a single letter where A = January, B= February, etc.

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